



A WEALTH OF -ATIONS

Of all the organisms hanging out on this blue marble we call Earth, us human-types have been the biggest modifiers, movers, shakers, benders and breakers of our fair planet. We grow food, we congregate in cities, we move around, we plan, we build machines, we communicate, we educate, we procreate . . . and do it faster and more thoroughly year after year after year at a larger and larger scale that has inevitably incorporated the entire world. The idea that globalization is merely a modern phenomena is pure poppycock; all of human history can be seen as a relentless drive to expand our tribe to every nook and cranny of the planet, and to increase the non-stop interactivity between peoples, for better or for worse. Think about it. Civilization, migration, urbanization, industrialization, modernization, communication: all have served to organize, spread, and interconnect us. What a wealth of -ations that all feed into one grand scheme of globalization!

You probably have learned about a lot of these -ation terms in other places, but I want you to think about them again for a few minutes in the context of this globalization concept. Without getting into too much tedious detail, I tell you that humans have been doing this globalizing gig since the birth of the species (or since a naked dude and a naked dudette were plopped down in a garden, if you prefer). **Migration** of humans started when the first modern *Homo sapiens* started trucking their tribal units to new turf outside of Africa over 70,000 years ago. Humans subsequently spread to all continents and all major islands, and this process of movement and interconnection is still going strong today.

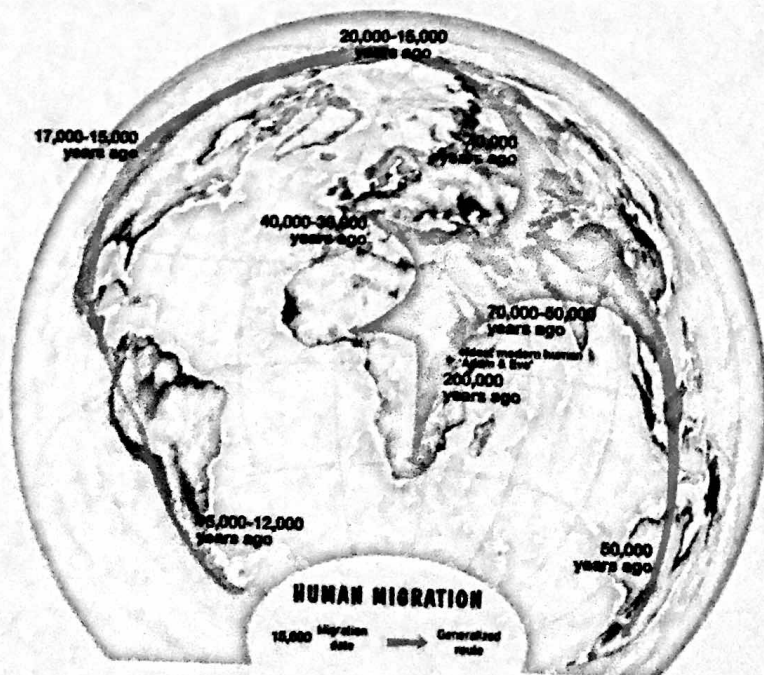
Humans used to migrate in order take advantage of new unpopulated lands, untapped resources, or to follow game; in today's world, they migrate for jobs, for security, for a better life in a richer place. Wait a minute—is there a difference between those migration motivations? Maybe not. Did you really think that “illegal” Mexican migration to the US or “unwanted” African migration to Europe was some new thing? Ha! We’ve been on that route forever. But let’s be civilized about this, which brings me to . . .

Civilization, a process that wildly impacted the human experience. See, we used to be the ever-expanding, ever-migrating, hunter-gatherer types living in small unconnected bands scattered across the planet, but around 12,000 years ago, some folks stumbled upon agriculture, and that was a game changer. Humans did a radical lifestyle shift from hunters to farmers. From that point forward, we hairless ape types turned into peeps who were developing cooler and cooler tools, growing more and more food, congregating together in bigger and bigger pools. We call that human civilization, fools!

Specifically neolithically, we refer to this slow cumulative process that occurred independently in many different locations between 10,000BC and 3,000 BC as **The Neolithic Revolution**. The nifty Neolithic! Neo for “new” and -lithic for “stone.” The New Stone Age! And those humans were totally new-rocking it out!



Take a bite of this apple, and let's get this globalization ball rolling!



The Migratory Circle of Life is nearly complete.



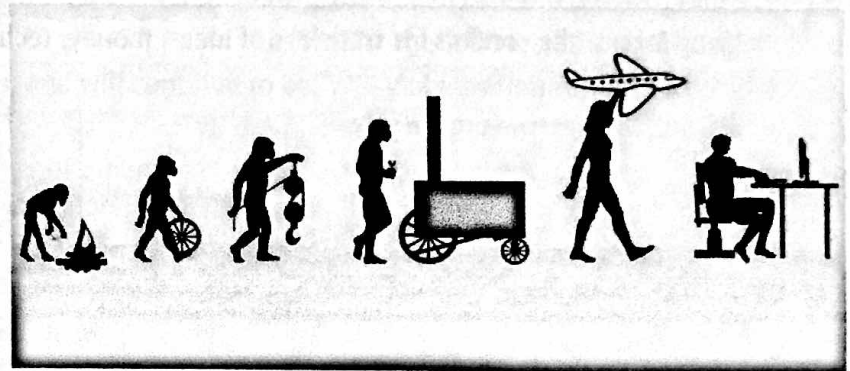
Early iPad prototype: the iPetroglyph.

See, all that extra food surplus as a result of growing plants in a predictable cycle led to folks settling down in a permanent place. Then some smart peeps who did not have to waste their whole lives just finding food began to pursue their passions . . . and thus they invented the **domestication** of animals, the wheel, pottery, tin-smithing, the Bronze Age, written languages, architecture, engineering, legal structures, religious institutions . . . you starting to get the picture here? Oh yeah, 'cuz they would have been painting pictures as well.

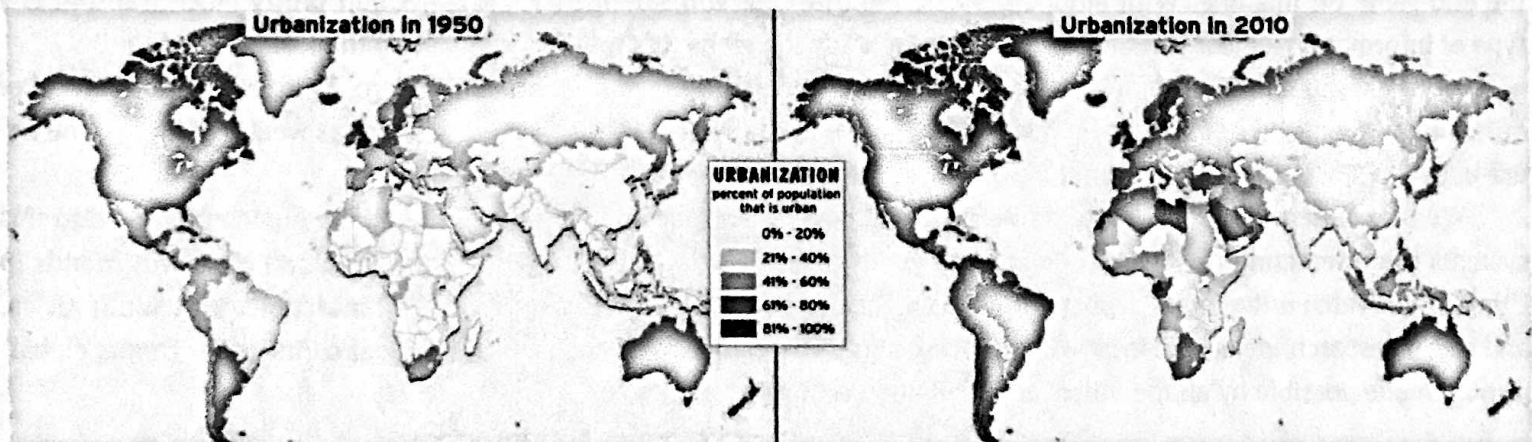
That's what the extra food is really important: it increasingly allowed people to do their own thing . . . to specialize their skills and inventions. This in turn created even better tools/technologies, specialization of work, and increasingly

complex societies and cultures which encouraged trade and cooperation. And not just trade within a single society, but between different ones in different places.

Aha! That produced intentional interconnections between populated areas in an effort to trade not just goods and services, but ideas and technologies and peoples themselves! Globalization game on! They call this stuff "out-sourcing" and "economic activity" and "technology transfer" in today's world . . . but it's all the same stuff as way back when. From the Flintstones to Futurama: Same shizzle, different millennium.

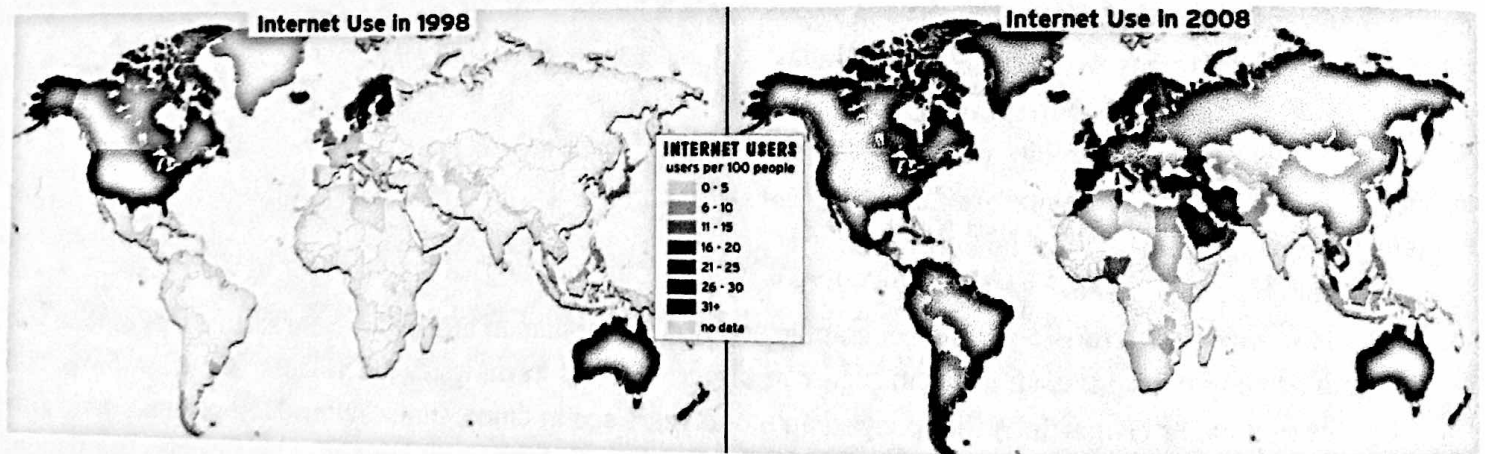


This civilization gig also transforms the geographic organization of human life: we go from small bands of folks out in the wild, to hanging out with each other in bigger in bigger numbers in things called villages, and then towns, and then cities. The first major civilizations that popped up 6,000 years ago in China, Indus Valley, Mesopotamia, and Egypt began a **perpetual process** of population growth and **urbanization** that continues unabated to this day. Translation: humans have increasingly chosen to live in big population clusters in built-up areas that we call cities as opposed to hanging out in the sparsely-populated rural areas we refer to as "the sticks." Humankind reached a milestone in 2009 when, for the first time in human history, over 50% of the world's population lived in an urban area. That urban-dwelling percentage is growing bigger, faster than ever, still to this day.



This urbanization has intensified human interaction exponentially over time; interaction which has accelerated the creation and transfer of ideas and technologies. New ideas, new inventions, new stuff! Which prompted **industrialization**, of course! Did you ever stop and wonder how it is possible for so many people to now cram themselves into cities, thus not being able to grow their own food nor collect their own water nor hunt their own bison? Because we invented machines to do the heavy lifting that used to require all our labor, and we discovered energy sources to fuel those machines. Bottom line: one dude on a tractor can grow enough food to feed a million people in the city; ten kids in a sweat shop can make clothes for that million, and oil-powered big machines can build skyscrapers and sewer systems and water lines for that million people. What the heck is left for those city folks to do?

Much like at the beginnings of the Neolithic Age, they have more time to think. To interact. To create. To be inventors, doctors, artists, engineers, scientists, industrialists, priests, rock stars, and whatever else we come up with. That's how we got electricity, the polio vaccine, the Hoover Dam, mobile phones, and computers. Unfortunately, with so much free time and such diverse and bizarre human motivations, we also have nuclear weapons, mustard gas, lawyers, and Sham-Wow. Such is the yin and yang of life. But I digress. This urbanization/industrialization combo has served to link up the globe like never before: more humans compacted into bigger, concentrated urban areas has caused even more interaction within the city, but also increasing interaction between cities worldwide. Cities are both the engines and the nodes of globalizing forces; the conduit for transfers of ideas, money, technologies, and power, everywhere, all the time.



This "connectedness" is now happening at light speed, thanks to advances in transportation and **communication**. Yep, our last -ation is really the power-booster icing on this globalizing cake. From smoke signals to the Pony Express to trans-oceanic telegraph cables, we humans have spent a lot of time and effort figuring out how to better transmit information to each other across the planet. Let me be the first to tell you, my brothers and sisters: we have almost reached the end-game on this one. With mobile phones, the Internet, and satellite TV/radio, we can pretty much transmit any type of information almost instantaneously to any part of the globe. It's totally insane if you think about it.

More ideas, more information, more interaction between more people than *ever* before. Twittering every second of our collective experience! And more folks are jumping into the system faster than ever before as well. Just look at the figure above to see the speed at which the world is hooking up on-line!

We have essentially set ourselves up as a single huge worldwide computer, wherein all the humans attached to this systems are interacting to solve problems, sell goods, provide news, and everything else! You can chat with friends in Uzbekistan, watch a live news report from Brazil, vacation at the Vatican, have business transactions with South Africa, and share research ideas via Skype with associates in Switzerland. That, my friends, is global connection. That is globalization, made possible by all the other -ations of note in this section.



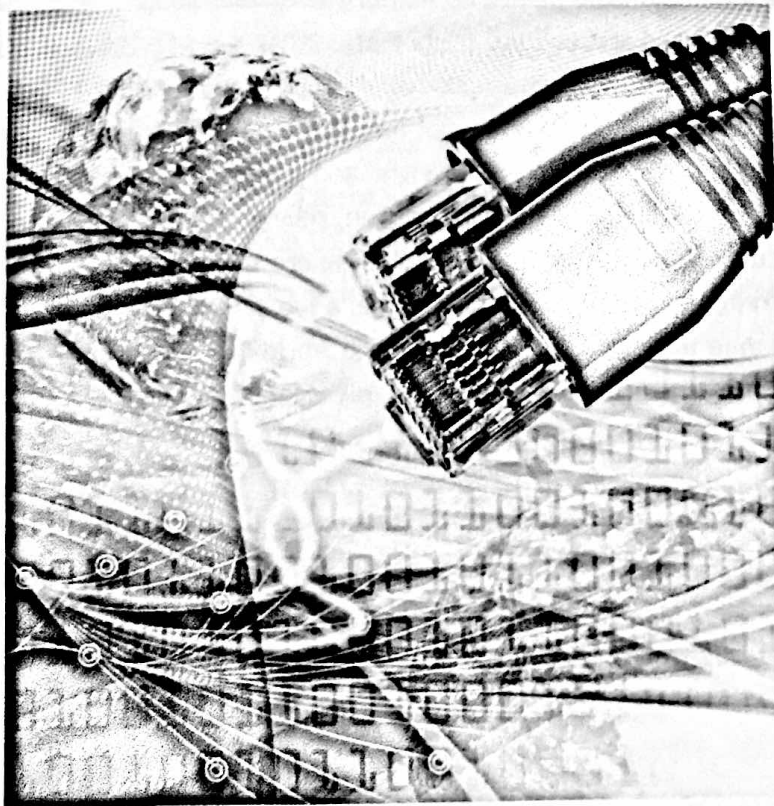
What does it all add up to? A more fully *connected* world in every sense of the word, in which the actions of any one person affects the lives of everyone. All of the aforementioned -ations have gone from local, isolated or internal concepts to completely planetary themes in scope and practice. In this increasingly populated and interconnected world, it is becoming clear that all "local" problems are actually "global" problems, from the movement of narcotics, to an outbreak of an infectious disease, to environmental pollution, to the existence of nuclear weapons, and so on.

And there are global problems a'plenty on our poor little planet! However, the solutions lie within this connected framework as well.

See, this globalization is neither bad nor good. It just is, and will continue to be. Will globalization result in a homogenization of culture? In a modernization of all societies? In a pacification of the planet? In a disintegration of the concept of the sovereign state? Oh, my oh my, what a delicious stew of other -ation possibilities that I will leave to you to debate . . . and we will return to the tensions of the local versus the global in the final chapters of this book, to see how globalization is playing out in the 21st century plaid world.

For now, I just wanted to spill some of that crazy globalization knowledge on your skullcap to see the sparks fly.

Knowledge is power, or at least empowerment. The more you know about the globalizing world in which we live, the more power you have. It's good to have at least a minimal geographical understanding of our planet. What's that? You don't know what geography is?



An all-inclusive neural network now . . . from a nebulous Neolithic nucleus!

Developed or Developing?

5

STINKING RICH places. Dirt POOR places. Some states are really well-off, and a whole lot more are struggling day to day to make ends meet. Why are some countries/regions rich, and others poor? As this manual has pointed out, it is not simply a matter of size of the country or the resources it contains. Reality, as always, is much more complicated than that. Before we can even identify traits of these developmental differences around the globe, we should first sort out some basic definitions and terms. Have you ever wondered. . .



IF THERE IS A "THIRD WORLD," WHERE ARE WORLDS ONE AND TWO?

In order to understand these crazy catch-phrases, let's start with a close-up of some other common conundrums. These words and descriptors are often tossed around to describe the state of states—that is, how well off they are, or inversely, how close to being in the global gutter they are.

A **developed country** is one that we would consider first and foremost . . . rich! Most texts, news articles and smart people somehow forget to speak the plain truth and just call a spade a spade. They will describe lots of different variables that account for how a state is rich, without ever outright just saying it. The developed countries are the rich ones! Admit it! Have you heard of a fully developed country that's flat broke? I suppose it's possible, but I've not partied in one yet.

Developed also carries the connotation that these countries are matured, at the end of the cycle, and therefore stable. I think that's a very good way to put it. But what cycle are we talking about? We'll get to that in a bit. You might also hear developed countries called *industrialized countries*, *more economically developed countries* (MEDC), *fully developed countries*, or even the *First World*.

A **developing country** on the other hand, is perhaps not so rich. However, it may not necessarily be totally poor either, which could be indicated by such measures as GDP and GDP per capita. Most of the planet would be in this category (both numbers of states as well as numbers of people) and, as such, there is tremendous range in the spectrum of "developing-ness." Some states are close to being fully developed. Others are desperately poor and stagnant or not really "developing" at all.

Perhaps developing countries are best described as all the regions that are obviously not fully developed. Is that a nebulous enough description? Yes, but it kind of works. The operative word here is *developing*, which means that these countries are in transition, are changing, are developing into something newer, better, and richer. No state is actively trying to un-develop are they?

Synonyms for developing countries include *less-developed countries* (LDCs), *least economically developed countries* (LEDs), *underdeveloped nations*, *undeveloped nations*, and the most popular term that everyone recognizes: the *Third World*.

The **Third World**. What a hilarious term. Everyone recognizes and uses it, but no one knows what it really means. And it really doesn't mean anything anymore. Here's the real deal: During the **Cold War**, there were two opposing camps: Team 1 was the capitalist democracies led by the US, aka "The West." Team 2 was the communist countries led by the USSR, aka "The Soviet Bloc." They became known, respectively, as the **First World** and the **Second World**. All the other countries were encouraged to join one of these teams, and many did—or at least would allow themselves to be associated with Team 1 or Team 2. In hindsight, it was comparable to siding up with Thing 1 or Thing 2 from "The Cat in the Hat." But I digress.

However, there was a group of holdouts who refused to side up. They wanted nothing to do with the Cold War nonsense, and identified themselves as non-aligned. India, Egypt, Ethiopia, and Yugoslavia led this **Non-Aligned Movement (NAM)**. I point them out by name because their status then, as now, has a lot to do with how the term "the Third World" evolved. Many other similar states joined this movement, and as you might imagine, their poor, less-developed economies became an identifying mark . . . a mark that still sticks today. There is no more Cold War, and there are no more First and Second Worlds, but somehow the Third World is still out there batting. Can someone please tell them the game is over?

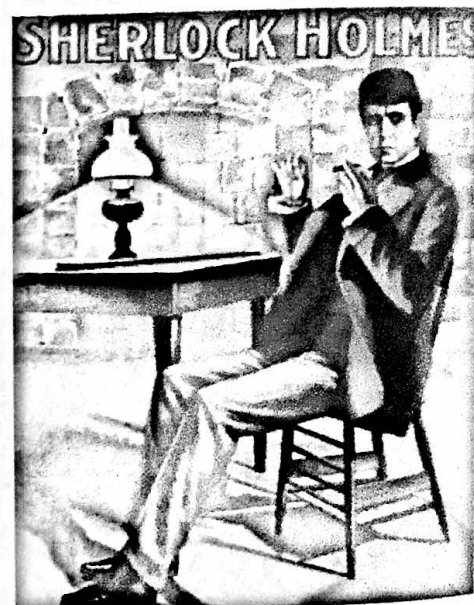
But seriously, why was it that these countries were so much poorer than the First and Second Worlds at the time? And why have some of them not changed much since the Cold War era, which is why the Third World terminology has stuck? Ah! I'm so glad you asked! To understand today's world of development, we must travel back in time just for a bit and pick up a theory we introduced at the end of the last chapter. . . .



A PITHY HISTORY OF THE PERIPHERY

Think back to that Immanuel Wallerstein stuff I threw at you in chapter 4. Remember the **world-systems** approach I alluded to? It was that set of mechanisms which concentrates wealth from the economic **periphery** to the **core**. Time to dust it off and take a second look through a historical lens, so that we can more clearly see why places like India and Vietnam and Brazil came to be on the peripheral edges of the world economy prior to the Cold War as well as how the US and Europe were at the core.

In doing so, we can also elaborate on why these descriptions have persisted into the modern era, along with some examples of major changes which are currently underfoot. Ha! Watson, the game is afoot! And Sherlock Holmes' Britain is a great place to start the investigation. . . .



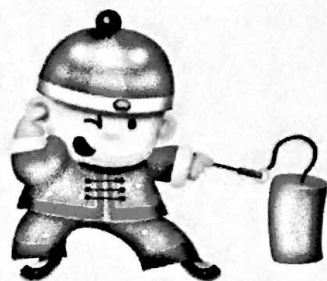
Deucedly developmental deductions, Watson!

COLONIAL PERIOD

In terms of world history, the 1500's to the early years of the 1900's are a total European heyday. Prior to this age, neither European states individually nor the region as a whole made a significant impact on the rest of planet earth. They

certainly were not anywhere near the 'core' of a global economy, nor a center of political power, nor a center of technical innovation. You would have had to go to India or China or the Middle East to get those things. Why? Because Europe was a backwater; the US was as of yet "undiscovered"; and Japan was an samurai-infested, isolated state.

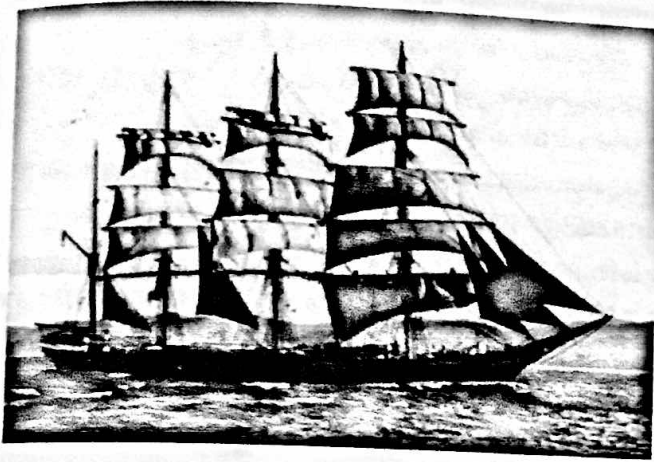
But what a difference a few hundred years makes! As the 1500's and 1600's unfolded, European traders, scientists, businessmen, sailors, and military men all increasingly adopted and refined technologies from other societies. Namely, Arab sailing technologies from the Middle East and gunpowder from the Chinese. As a major case in point, the Chinese had invented explosive powder, and employed it for . . . ready for this? . . . fireworks! The Europeans borrow this explosive powder stuff from China and



Chinese firework make big bang for Europeans!

they make . . . guns! I think you may be starting to see how the core/periphery tide was starting to turn already . . .

The Europeans take their newly modified and improved technologies and build grand navies and militaries which inevitably make them masters of the seas, both militarily and for trade. And with that mastery came colonization and imperial takeover . . . you know, the Europeans setting sail and taking over the rest of the planet. North America, South America, Australia, and eventually Sub-Saharan Africa, South Asia, even parts of China et al, come under the direct control and exploitation of the Europeans. Raw resource wealth, wealth from any existing manufacturing, along with wealth created by trade itself, now flowed from the colonized areas back to Europe. Europe is quickly becoming the core.



Tools of the "trade"

Then starting in the 1700's the Europeans are the first to undergo this whole process we now call industrialization. Making machines to do stuff that humans and animals used to do . . . and doing it better, faster, cheaper! Virtually all aspects of agriculture, manufacturing, mining, and transportation are made way more productive and profitable. And this also means that Europe is now the center of innovation and the technology leader . . . which of course makes them richer still. Europe sustains this revolution by fully mastering trade relationships around the globe: absorbing the raw resources of the planet, taking them back home to be processed (thus creating jobs and

wealth at home) and then pushing their manufactured goods to their colonies.

Example: UK forces India to stop producing cloth by insisting that they instead sell the UK all their cotton. The UK takes the cheap cotton back to the textile mills in London, produces it into cloth, and then sells the finished goods back to India, at a higher price of course. Buy low, sell high. Europe is now the core and India has become part of the periphery. It is important to note that China undergoes a similar devolution at this time, having their core status severely eroded by European, Russian and even Japanese trade dominance during the 1800's . . . culminating in the catastrophic 1839 **Opium Wars** in which the UK totally dismantled Chinese authority altogether in their bid to forcibly sell opium under the banner of "free trade" to China. Wow. Put that in your pipe and smoke it, China. And they did.

Please keep in mind, in this scenario Europe's strong naval presence is perhaps more significant in its successful take-over of global trade systems than it is for its takeover of physical territory itself. Because, inevitably, they will lose those colonies, but the trade dominance remains for some time after that. Here is an equation to consider:

Dominating world trade creates wealth at home = more taxes collected by government = stronger government = government invests more back into technology, infrastructure, military and businesses = stronger military and businesses = more power abroad to colonize and control trade = more wealth = go back and repeat equation. Repeat for centuries.

Not bad for a few hundred years work by folks who previously were groveling in the mud waiting for King Arthur to find the Grail. But changes are coming. . .



Got Grail?

INTO THE MODERN ERA

Of course, the good old days don't last for the Europeans forever. Independence movements worldwide were kicked off by the American Revolution in 1776, but they didn't happen all at once. It took from 1800 right on up to the 1960's for those European imperialists to lose control of all of their overseas possessions, with many modern African states the last to shake off the colonial hangover. These movements coincide with the abolition of slavery and serfdom worldwide, and thus the end of free labor, which also put a crimp in the European wealth-generating machine.

In addition, some former colonies and others learned the lessons of European history very well . . . and then duplicated them! The United States in particular underwent its own industrial revolution and rise to global power, and thus entered the core arena itself by the 1900's. Russia and Japan modernized as well, and quickly became core players too, albeit on rockier paths that we will investigate further in later chapters. Australia and Canada followed suit. Point is, the core expanded to include others now in competition with the European masters, and the periphery became even weaker as these new global power players had more economic strength than ever imaginable in the past.

But hang on! Do not interpret this as the end of European economic dominance! Because, as I suggested above, the trade patterns had been well-established for hundreds of years, and they proved to be a much more tenacious beast than simple ownership/control of colonies. Colonial labor may not have been free anymore, but let's face it: former-colony labor remained extremely cheap, as it does into today's world. Basic manufacturing has shifted from the core to the periphery in order to take advantage of this cheap labor, but the profits still go to the core. Same as it ever was.

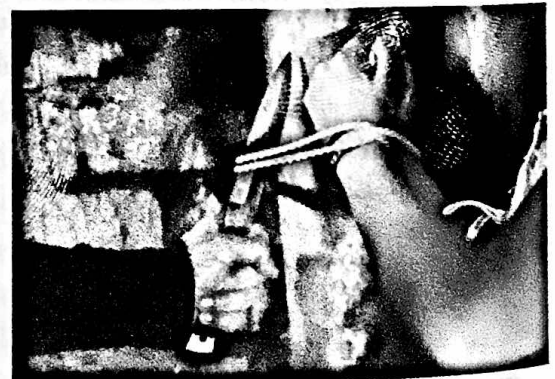
In addition, while the UK or France or Spain may have officially left the colony of India or Algeria or Chile, they usually left behind multinational corporations under their sponsorship which still controlled and/or profited from the raw resource of the former colony. This is a situation that is still common today. Almost all of the biggest and richest multinational companies of the world originate in Europe or the US (China is now catching up fast), and operate with huge competitive advantage in the "poorer" parts of the planet . . . you know, the periphery! Local yokel companies in Africa or Asia can't possibly compete with the likes of Wal-Mart or Exxon. Core wins!

End result: core countries still import cheap raw resources from the periphery and produce high-value commodities which they then export to the periphery. Core wins! Quite frankly, the equation has not changed much, and neither have the goods traded. The periphery exports cotton, tea, bananas, oil . . . and imports finished goods. The core imports raw stuff and basic manufactures, and exports guns, machines, finished goods, etc. Same as it ever was.

Let's be brutally honest here: the rich, core countries have absolutely no vested interest in changing the system. Why would they? No government or business is going to actively try to change the rules of a game that ensures their own victory. So is economic history finished? Is the system now set forever? Ha! Nothing stays the same forever, and even in the most structured system. . . .

ESCAPE IS POSSIBLE!

As you have now seen in this historical overview, these core/periphery labels are not stagnant statuses my friends! Oh no! China and India in particular used to be core, then were subverted to periphery during the rise of the Europeans, but now they are breaking out again. And speaking of the Europeans: for sure, they are still rich parts of the core . . . but they are starting to slip a bit, and no one here in the 21st century would label Western Europe as a center of innovation or technology anymore. Many analysts are now speculating that perhaps even the top-slotted USA is taking it on the chin from the rising Asian titans. Times are a-changing. However, it is difficult to be dethroned from the core once you are there, so there is no point to focus too much on the top dogs . . . they will maintain their monopoly for some time to come. More to the point, let's look at those entities that are climbing out of the periphery to join the kings of the core. . . .



Let's get the heck out of the periphery!

ESCAPEES OF NOTE

There are a variety of countries in the world right now that don't fit nicely into the definite core or definite periphery categories. Some states do have significant control over their own resources, or have competitive local industries that do compete on the international stage, or do make more high-valued finished goods for export. Of note, Brazil, Argentina,

Chile, Turkey, South Africa, Mexico, South Korea, Indonesia, Bahrain, and the UAE could all be considered much further down the development path, and I even refer to them as power-players within their respective regions.

With no reservation though, China and India are the future core members to consider. How did they climb out of the core/periphery cycle? Well, both of these countries are unique in that they were previous core members, countries with huge populations, and countries with significant periods of technological innovation and know-how. It's not like they have had to start from scratch. The current re-rise of these Asian giants has more to do with throwing off the yoke of colonial powers and reasserting political, and then economic independence.

India chucked out the Brits in 1947; the Chinese started their modern era after the defeat of their Japanese oppressors in WW2, and their bloody civil war, which ended in 1949. Both states have used their massive pool of cheap labor to increase agricultural production, create a manufacturing sector, and invest in their infrastructure. As pointed out in previous chapters, China has really focused heavily on its manufacturing sector to make a myriad of products for cheaper than anyone else on the globe, and they have done this exceptionally well, to the point of now easily beating the core countries in the competition. Ever see *Made in China* on the tag of any products you own? Ha! You probably can't find anything you currently possess that was NOT made in China!



We take this back now.

With all the massive inflow of wealth, China has invested heavily in its infrastructure, technology and industries to make themselves even more competitive . . . hey! Just like the core countries do! Yep. China is now in the core. India is not quite as far along, and is taking a slightly different path. Instead of focusing on manufacturing, India has been specializing in service sector and high-end stuff like computer programming. Ever call your Dell computer 1-800 help line? Who did you talk to? Yeah, you know it! Someone in India! Their famous technical support centers are even featured in *Slumdog Millionaire*! Oh yeah! Citing Indian specialization reminds me to include this next section. . . .

ESCAPE ROUTES

I have now alluded to different strategies which India and China have taken in order to become more developed, and less peripheral. Let's go ahead and flush these things out totally so you can better assess the strategies that other countries have taken (or will be taking in the future) to attempt to better their situation. There are some major paths that have been followed by poorer peripheral states in order to bust out of the cycle:

1. **Nationalize a particular resource** in the country, focus on efficiency and technology for that one industry, become way more competitive globally for that one industry, and thus reap a bigger percentage of economic benefits. We've talked about this concept already. Middle Eastern countries, and almost all other OPEC members, did the nationalization thing with their oil. It sometimes results in alienation by the core countries, and less competitive and poorly run local industries. But no one would argue that Saudi Arabia, Venezuela, or even Russia is worse off for nationalizing their oil. It has reaped large profits in the modern era, and gained them some measure of control in the global economy. Other states have done it with other commodities as well, even into the modern era.
2. **Import substitution** has been experimented with ever since the **Great Depression** crunched the whole global system. This is a policy in which the government works with private industry to set up production of a variety of higher-valued manufactured goods like cars, washing machines or textiles. The point is not to export them, but sell them to their own citizens, thus decreasing the reliance on importing expensive finished goods from other countries. These local goods are given an advantage by the government putting high taxes or **tariffs** on similar goods being imported from other countries, thus making the local goods cheaper and a better deal. More of a short-term fix than long-term solution, but has had mixed successes.

3. **Specialization** on a few commodities which, with government help, can become efficient enough to compete on the export market globally. China focused on making a literal boatload of manufactured commodities at cheap prices, and has done very well. But most other countries usually focus on just a handful of things: India is focusing on service sector jobs and computer programming, while Brazil focuses on an extremely competitive steel industry, as well as military computer applications.

Japan, Taiwan and South Korea all have made trillions focusing on consumer electronics and automobiles. Those country names are just synonymous with high quality products! When a country does something the best, everyone knows it, and everyone wants it . . . especially when they do it the best for the cheapest . . . then that state is making the money! And thus heading out of the periphery, which many of those **Asian Tigers** have done!

Make no bones about it; in all of the examples above, former peripheral states challenged and out-competed core states in these industries, which is why they can't be counted among the totally undeveloped, not-as-developed, or underdeveloped states in the world today. Egads! I have totally lost sight of the development of this chapter! We were supposed to be talking about the developed versus the developing world! Let's get back to topic. . .



Consumer electronics: Asian Tiger escape route.



DIFFERING DEGREES OF DEVELOPMENT

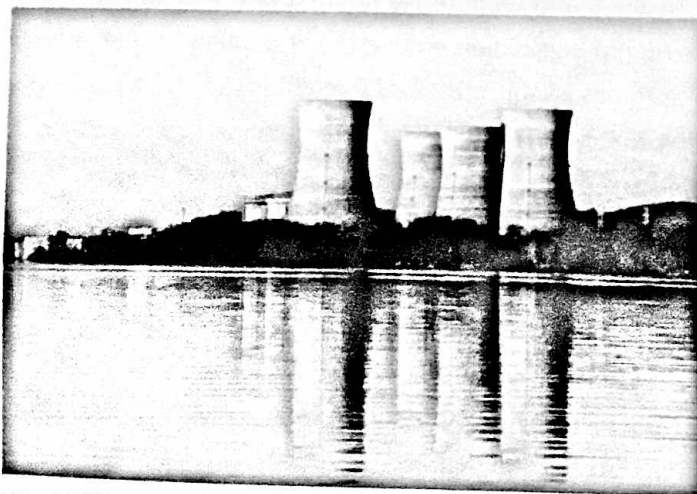
What are some common measures of the fully developed state versus the fully undeveloped one? The richness versus poorness? Core versus periphery? People in a developed state typically enjoy a high standard of living—i.e., life is good. Food in the fridge, healthy children, bills paid, access to health care, good housing, good environment, and there's even some leisure time to party. Yeah, that sounds about right. And developing? Those folks are probably not eating as much as they should, maybe not getting access to health care, maybe not having clean water or electricity, and their leisure time is otherwise known as "too sick to work."

But we can do even better than that. Let's look systematically at some categories of human life to better compare and contrast the standards of living on our planet. Below is a brief outline of some of the contributing factors of current levels of development in the wider world. This list is not exhaustive, as we have not included all the historic factors that have influenced current state of affairs, or physical resources that these regions possess. However, I want you to think

about the bigger developed/developing picture here—if we can understand the mechanics of what is going on in these places, we can better understand the present and better predict the future.

TECHNOLOGICALLY SPEAKING . . .

The fully developed state has the highest levels of technology across the board. I'm not just talking about computers here either. Agriculturally, they can grow more food with way fewer people; one big tractor can do the work of hundreds of humans. Industrially, they can produce more and better stuff with machines in factories that typically displace workers as well. Machines do the



Nukes are high-tech!